AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q94029

Application No.: 10/573,966

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph bridging page nos. 1-2 with the following amended paragraph:

[0002]

A supercharger incorporated in an engine of an automobile or the like is adapted to supply compressed air to the engine to increase an engine power output by rotating an impeller at an exhaust side by an exhaust gas from the engine to rotate another impeller disposed in an intake side coaxially with the impeller at the exhaust side. Since the exhaust side impeller is exposed to the high temperature exhaust gas discharged from the engine, it has been made from a heat resisting Ni-based super-alloysuperalloy by a lost wax casting process because of its less complicated form. On the other hand, since the intake side impeller is not exposed to a high temperature and hence, it is made mainly of an aluminum alloy. In recent years, however, since the impeller is required to rotate under a higher speed in order to improve the combustion efficiency, a titanium alloy has been tried to for use because of its light weight and a high strength. Further, a magnesium alloy has been also tried to for use because it will be able to realize a much more weight reduction as compared with the titanium alloy.

Please replace first full paragraph on page 16 with the following amended paragraph:

Fig. 4 is a perspective view of essential portions of the stationary die 7 (for clarity, one of the slide dies 8 and one of the slide supports 9 are only shown), and Fig. 5 is a diagrammatical illustration of the slide die 8. One slide die 8 is comprised of parts: a hub cavity-defining portion 11, a blade cavity-defining portion 12 and a bottomed groove cavity-defining

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portion 13 (shown by a dotted line). The hub cavity-defining portion 11 defines a hub surface 2 in a space made between adjacent full blades and including one splitter blade. The blade cavity-defining portion 12 defines two opposed blade surfaces 5 of the adjacent full blades, and a trailing edge face 21, a fillet face 22 and a leading edge face 23 forming parting lines in a space defined by the blades. The bottomed groove cavity-defining portion 13 defines a splitter blade. Namely, one slide die defines a form corresponding to a space 10 shown by oblique lines in Fig. 2.

Please replace paragraph bridging pages 16-17 with the following amended paragraph:

Fig. 6 is a side view showing a bonding structure between the slide die 8 and the slide support 9. The slide die 8 is mounted to a stationary pin 16 fixed to the slide support 9 through a bearing mounted at a tip end of the stationary pin 16 for rotation about a rotational axis 14, and is connected to the slide support 9.

Please replace paragraph bridging pages 17-18 with the following amended paragraph:

[0021]

In the present invention, it is important to determine of the rotational axis of the slide die. In a particular technique, the undercut in the radial direction of the space 10 shown in Fig. 2 can be searched by a three-dimensional model previously using CAD/CAM. In an alternate technique, at first, a partial model including two full blades adjacent to each other with one splitter blade interposed there between is made, and a plastic resin is poured into the partial

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model to produce a plastic resinous model. Then, the plastic resinous model is actually withdrawn from the partial model. Thus, the undercut can be searched by this test. The rotational axis 14 which is a motional line required for releasing the slide die 8 from the sacrificial pattern is determined by any of the above-described techniques. It is preferable that the direction of the perfect undercut which does not contact with the sacrificial pattern can be searched, but in fact, the sacrificial pattern is shrunk on the order of about 1 % and hence, a space of several ten microns to several hundreds hundred microns is present between the slide die and the sacrificial pattern after the molding. In addition, even if the motional line for the

slide die 8 interferes with the impeller 1 to a certain extent at the stage of a CAD/CAM analysis,

because the sublimation pattern itself is resiliently deformed, the releasing of the die can be

achieved without influence to the dimensional accuracy.

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